JOURNAL OF OPTIMIZATION
THEORY AND APPLICATIONS

Vol. 39, No. 1 January 1983

CONTENTS

CONTRIBUTED PAPERS

A Generalized Newton Algorithm Using Higher-Order Derivatives, *R. Kalaba and A. Tishler* 1

Positive Solutions of a Nonlinear Initial-Value Problem on Half-Line, *S. K. Sachdev* 19

Controllability and Controllability with Prescribed Controls, *G. Anichini* 35

Optimal Selection of Observation Times in the Linear-Quadratic Gaussian Control Problem, *R. W. Longman and C. A. Cooper* . . . 47

Optimal Control of Discrete Systems Involving Delays, *J. Doležal* . . 59

Performance Bounds for Hierarchical Systems under Partial Dynamic Information, *T. Başar* 67

Existence of Value in Differential Games with Terminal Cost Function, *L. S. Zaremba* 89

Hybrid Algorithm for Sequencing with Bicriteria, *K. S. Lin* 105

TECHNICAL NOTES

On a Domination Property for Vector Maximization with Respect to Cones, *H. P. Benson* 125

A Note on the Strategic Adoption of a New Technology, *J. F. Reinganum* 133

Laguerre Series Direct Method for Variational Problems, *C. Hwang and Y. P. Shih* 143

ANNOUNCEMENTS 151

BOOK NOTICES 153

GENERAL INFORMATION

Editorial Policy 155

Preparation of Papers 157

Editorial Addresses 161

JOURNAL OF OPTIMIZATION
THEORY AND APPLICATIONS

Vol. 39, No. 2 February 1983

CONTENTS

CONTRIBUTED PAPERS

Expected Number of Steps of a Random Optimization Method, *C. C. Y. Dorea* 165

Preemptive and Nonpreemptive Multi-Objective Programming: Relationships and Counterexamples, *H. D. Sherali and A. L. Soyster* . 173

Conflict Dissolution by Reframing Game Payoffs Using Linear Perturbations, *Y. K. Kwon and P. L. Yu* 187

Two-Noisy-versus-One-Silent Duel with Equal Accuracy Functions, *T. Kurisu* 215

Instant Controllability of Linear Autonomous Systems, *R. M. Bianchini Tiberio* 237

Weak Global Controllability of Nonlinear Systems, *J. E. Rubio* . . . 251

Asymmetric Wiener–Poisson Control, *H. Weiner* 261

On the Problem of Observation Spillover in Self-Adjoint Distributed-Parameter Systems, *L. Meirovitch and H. Baruh* 269

Distributed Control of a System Governed by Dirichlet and Neumann Problems for a Self-Adjoint Elliptic Operator with an Infinite Number of Variables, *I. M. Gali and H. A. El-Saify* 293

TECHNICAL NOTE

Shifted Legendre Direct Method for Variational Problems, *R. Y. Chang and M. W. Wang* 299

BOOK NOTICES 309

RESEARCH REPORTS 311

GENERAL INFORMATION

Editorial Policy 313

Preparation of Papers 315

Editorial Addresses 319

JOURNAL OF OPTIMIZATION
THEORY AND APPLICATIONS

Vol. 39, No. 3 March 1983

CONTENTS

CONTRIBUTED PAPERS

Scheduling of Plant Maintenance Personnel, *S. M. Roberts and L. F. Escudero* 323

Minimum Problem-Size Formulation for the Scheduling of Plant Maintenance Personnel, *S. M. Roberts and L. F. Escudero* 345

An Analytical Expression and an Algorithm for the Volume of a Convex Polyhedron in R^n, *J. B. Lasserre* 363

Probabilistic Prospects of Stackelberg Leader and Follower, *A. Alkan, T. Brown, and M. R. Sertel* 379

Maximum Descent Monotone Solutions of an Ordinary Differential Equation with a Discontinuous Right-Hand Side, *M. Falcone, and A. Siconolfi* 391

Liapunov Reachability and Optimization in Control, *R. J. Stonier* . . 403

The Attainability Domain of a Coasting Vehicle, *M. Guelman* . . . 417

On the Ritz Penalty Method for Solving the Control of a Diffusion Equation, *M. A. Ibiejugba* 431

BOOK NOTICES 451

GENERAL INFORMATION

Editorial Policy 455

Preparation of Papers 457

Editorial Addresses 461

JOURNAL OF OPTIMIZATION
THEORY AND APPLICATIONS

Vol. 39, No. 4 April 1983

CONTENTS

CONTRIBUTED PAPERS

Nongradient Minimization Methods for Parallel Processing Computers, Part 1, *C. Sutti* 465

Nongradient Minimization Methods for Parallel Processing Computers, Part 2, *C. Sutti* 475

Error Estimate for the Modified Newton Method with Applications to the Solution of Nonlinear, Two-Point Boundary-Value Problems, *M. D. Smooke* 489

One Pursuer and Two Evaders on the Line: A Stochastic Pursuit–Evasion Differential Game, *M. Pachter and Y. Yavin* 513

A Convex Optimal Control Problem Involving a Class of Linear Hyperbolic Systems, *Z. S. Wu and K. L. Teo* 541

First-Order Strong Variation Algorithm for Optimal Control Problems Involving Hyperbolic Systems, *Z. S. Wu and K. L. Teo* 561

BOOK NOTICES 589

GENERAL INFORMATION

Editorial Policy 593

Preparation of Papers 595

Editorial Addresses 599

AUTHOR INDEX TO VOLUME 39 603